



CITY OF TIGARD, OREGON

ADDENDUM #2

CONSTRUCTION SERVICES

3.0 MG 550-FOOT SERVICE ZONE RESERVOIR NO. 2

The following information serves as Addendum #2 to the City of Tigard's Contract Documents for the construction of the 3.0 MG 550-Foot Reservoir No. 2. The information in this Addendum #2 serves to clarify information that is contained in Volume #1, Contract Documents, Volume #2, Technical Specifications & Volume #3, Drawings.

ADDENDUM NO. 2
TO THE
CONTRACT DOCUMENTS
FOR
3.0 MG 550-FOOT RESERVOIR NO.2
FOR
CITY OF TIGARD, OREGON

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS TO THE SAME EXTENT AS THOUGH IT WERE ORIGINALLY INCLUDED THEREIN. ISSUED THIS 6TH DAY OF SEPTEMBER 2007.

BIDDERS MUST ACKNOWLEDGE RECEIPT OF ALL ADDENDA ON THE BID PROPOSAL FORM. BID PROPOSALS THAT FAIL TO ACKNOWLEDGE ALL ADDENDA MAY BE CONSIDERED IRREGULAR AND MAY BE REJECTED.



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ITEM NO. 1 –INVITATION TO BID

A. On Page 6, Section 4 General Information, **DELETE** Paragraph 3 and **REPLACE** Paragraph 3 with the following:

“ANTICIPATED TERM OF CONTRACT

The Contract period shall begin on or around October 1 and end on or around November 30, 2008. This timeframe may be revised slightly prior to contract execution. However, regardless of the notice to proceed date this work shall be substantially complete with 366 days from the notice to proceed date and finally complete within 427 days of the notice to proceed date. In accordance with Tigard Public Contracting Rules, the total duration of the Contract may not exceed five (5) years.”

B. On Page 16, Attachment A, Public Improvements Contract, **DELETE** Paragraph numbered 1. and **REPLACE** with the following:

“1. Bidder agrees that the Work will be substantially completed and ready for final payment in accordance with paragraph 14.13 of the General Conditions on or before the dates or within the number of calendar days indicated in Section 4, Paragraph 3 of the Invitation to Bid. Bidder accepts the provisions of the Public Improvements Contract as to liquidated damages in the event of failure to complete the Work within the times specified in the Invitation to Bid.”

C. On Page 25, Attachment F, Public Improvements Contract, **DELETE** Paragraph B and **REPLACE** with the following:

“**B. Timing of Payments:** Progress payments, less a five percent retainage as authorized by ORS 279C.555, shall be made to the Contractor within thirty (30) days of the City's receipt of the statement of services. The Contractor agrees that the "Time of Completion" is defined in the Invitation to Bid, and agrees to complete the work by said date. The Contractor and City agree that the City will suffer damages each day the work remains uncompleted after the Time of Completion and that the amount of those damages are difficult to calculate. Contractor and City agree that a reasonable amount of damages for late completion is **\$2,000** per day and Contractor agrees to pay damages in that amount if the work is not completed by the Time of Substantial Completion and agrees to pay damages in the amount of **\$1,000** if work is not complete prior to the designated final completion date.”

ITEM NO. 2 –TECHNICAL SPECIFICATIONS – DIVISION 2, SECTION 02220

A. On page 02220-5, **REPLACE** Subsection 2.2, with the following:

“2.2 Crushed Drain Rock

Crushed drain rock material shall consist of angular rock with a maximum size in the range of 1½ to ¾ inch or with sizes as noted in the Plans with not more than about 2% passing the No. 200 sieve as determined by wet sieve analysis, ASTM D1140-97.

The crushed drain rock material shall meet the requirements for fracture and durability as specified in ODOT Standard Specifications for Highway Construction Section 02630.10 (b) and (c).”

ITEM NO. 3 –TECHNICAL SPECIFICATIONS – DIVISION 2, SECTION 02221

A. On page 02221-4, Subsection 3.4, Paragraph B, **ADD** the following:

“During wet weather or as directed by ENGINEER, native materials shall be maintained one foot above invert grade for reservoir footing base rock. Within a maximum of one day prior to placement of base rock for reservoir footing the one foot native materials may be excavated.”

B. On page 02221-5, **ADD** the following subsection:

“3.8 Foundation Drainage for Structures

A. The foundation drain for the reservoir shall be installed as shown on the drawings. The perforated drain pipe shall be installed in an excavated trench in the reservoir base rock to reduce potential for deformation of the drain pipe.”

ITEM NO. 4 –TECHNICAL SPECIFICATIONS – DIVISION 2, SECTION 02505

A. On page 2505-1, **ADD** to Subsection 1.2:

“C. Pavement overlays to be as per ODOT specification sections 00610, 00620, 00730 and 00744.”

ITEM NO. 5 –TECHNICAL SPECIFICATIONS – DIVISION 2, SECTION 02801

A. **ADD** the attached specification Section 02801 titled “Cedar Fencing”.

ITEM NO. 6 –TECHNICAL SPECIFICATIONS – DIVISION 3, SECTION 03300

A. On page 03300-13, **DELETE** Subsection 2.17.

ITEM NO. 7 –TECHNICAL SPECIFICATIONS – DIVISION 3, SECTION 03400

A. On page 03400-6, **DELETE** Section 3.3 and **REPLACE** with the following:

3.3 Precast Concrete Manholes

A. All rigid non-reinforced pipe entering or leaving the manhole (new or existing manhole) shall be provided with flexible joints within one foot of the manhole structure and shall be placed on compacted bedding. Concrete pipe and ribbed HDPE pipe connections to manholes shall be grouted watertight with non-shrink grout. PVC pipe shall be connected to

manholes using an approved adapter specifically manufactured for the intended service. Adapters shall be Fernco, Kor-N-Seal, or approved equal

B. Concrete Base Installation

1. Bases shall be set at the proper grade to allow pipe openings to match the grades for connecting pipes. The invert shall be constructed to a section identical with that of the sewer pipe. Where the size of sewer pipe is changed at the manhole, the invert shall be constructed to form a smooth transition without abrupt breaks or unevenness of the invert surfaces. Where a full section of concrete sewer pipe is laid through the manhole, the top shall be broken out to the spring line of the pipe for the full width of the manhole, and the exposed edge of the pipe completely covered with mortar. During construction, the CONTRACTOR shall prevent sewage or water from contacting the new concrete or mortar surfaces to prevent damage to the fresh concrete or mortar until the initial set has been achieved.
2. Manhole base levels shall be set level so that base gravel fully and uniformly supports it in true alignment with uniform bearing throughout full circumference. Do not level the base sections by wedging gravel under the edges.
3. Flexible connectors shall be installed in the base section to form a permanently watertight seal.

C. Manhole riser sections

1. Precast manhole components may be used to construct standard, drop and carry-through manholes. Manholes less than 4 feet in depth measured from the springline of the pipe to the bottom of the lower riser ring shall be flat-top manholes.
2. Install manhole riser sections at the location shown on the plans. All sanitary sewer and pollution control manholes joints shall be watertight and shall use rubber gaskets. All manhole penetrations shall be watertight. Complete manholes shall be rigid. Compact backfill in accordance with the provisions stated elsewhere in this document.
3. All lift holes shall be thoroughly wetted, completely filled with mortar, and smoothed and pointed both inside and out to ensure watertightness.
4. The shortest length of riser section to be incorporated into the manhole shall be installed immediately below the flat slab top or cone.
5. Properly locate and plumb each manhole riser section.
6. Install manhole extensions and top slabs in accordance with manufacturer's specifications and as shown on the plans. Lay section risers with sides plumb and tops level. Make joints and penetrations watertight.

D. Grates, Frames, and Covers

1. Manhole frames, grates and covers shall be installed in such a manner as to prevent infiltration of surface or groundwater between the frame and the concrete of the manhole section. Use preformed rubber ring to form a watertight seal.
2. Manhole frames and covers shall be installed to grades shown on the drawings or as directed.
3. Adjustment of manhole castings shall be made using specified precast grade rings and approved rubber ring joints.
4. The maximum depth of adjustment below any manhole casting shall be 16 inches, and a minimum depth of adjustment shall be 4 inches.

E. Manhole Top Slabs

1. Top slab shall be a minimum of 12 inches thick. Top slab shall be designed and stamped by a registered Oregon Professional Engineer.

ITEM NO. 8 –TECHNICAL SPECIFICATIONS – DIVISION 9, SECTION 09900

- A. On page 09900-11, Subsection 3.8, Paragraph B, **DELETE** Item 4.c. and **ADD** the following:

“c. Paint System — Apply two coats 9 mils each, Carboline Bitumastic 50, or approved equal.”

- B. On page 09900-13, Subsection 3.8, Paragraph B, **DELETE** Paint Schedule and **REPLACE** with the following:

Paint Schedule

Item	Location	Material	Finish System
Concrete Walls & Roof	Exterior Surfaces Below Finish Grade and Buried Surfaces	Concrete	Paint System P-4
* Handrails/ Guardrails & Ladders	Exterior	Steel	Paint System P-2
Piping and Specials	Interior Surface Exterior Surface, Exposed Buried	Steel Steel & Ductile Iron Steel	Paint System P-3 Paint System P-3 Paint System P-3
Miscellaneous Metals	Exterior Surface, Exposed	Steel	Paint System P-2

ITEM NO. 9 –TECHNICAL SPECIFICATIONS – DIVISION 13, SECTION 13206

A. On page 13206-38, Subsection 3.17, Item C, **REPLACE** No. 4 the following:

“4. Any cracks, voids, honeycomb or cold joints shall be repaired as per AWWA D110. Any cracks or crazing shall be observed by the ENGINEER prior to any repairs being made. If cracks are repaired prior to observation by ENGINEER, the repair will be required to be removed and the repair completed following observation.”

ITEM NO. 10 –TECHNICAL SPECIFICATIONS – DIVISION 13, SECTION 13207

A. On page 13207-2, Subsection 2.2, Item A, **REPLACE** the fourth sentence with the following:

“Ladders mounted inside the reservoir shall be stainless steel type 316.”

ITEM NO. 11 –TECHNICAL SPECIFICATIONS – DIVISION 15, SECTION 15000

A. On page 15000-7, Subsection 2.2 **DELETE** Paragraph E. and **REPLACE** with the following:

- E. Polyethylene Piping – Plastic pressure pipe (1/2 inch through 4 inch) shall be polyethylene thermoplastic piping conforming to AWWA C901-02.

ITEM NO. 12 –TECHNICAL SPECIFICATIONS – DIVISION 16, SECTION 16900

A. On page 16900-5, **DELETE** Subsection 2.4

ITEM NO. 13 – TECHNICAL SPECIFICATIONS – DIVISION 16, SECTION 16950

A. On page 16950-2, Subsection 1.1, Paragraph E, **DELETE** Items: 2, 4 & 5 and **REPLACE** with the following:

- 2. The Contractor shall make all final power and signal connections to all Telemetry equipment provided under this section.
- 4. The Owner shall be responsible for paying all applicable fees and modifying the existing City of Tigard FCC Radio License.
- 5. The Telemetry Subcontractor shall be responsible for all programming modifications of the existing Mater Telemetry PLC and Operator Interface (OI) software.

B. On page 16950-4, Subsection 1.3, Paragraph B, **DELETE** “System Integrator” and **REPLACE** with “Telemetry Subcontractor”.

C. On page 16950-4, Subsection 1.4, Paragraph A, Item 2 **DELETE** “22” by 34””

- D. On page 16950-9, Subsection 2.4, Paragraph B **DELETE** “(LT)” and **REPLACE** with “(PIT)”
- E. On page 16950-12, Subsection 2.4, Paragraph G **DELETE** Item 1 and **REPLACE** with the following:
1. Level indicator and transmitter (LIT) for Monitoring elevated tank level shall be Ohmart/Vega, Vegapuls 62 high frequency radar level sensor and Vegamet 624 indicator/transmitter or approved equal. The sensor shall be mounted in the sensor reservoir as shown on the drawings and the indicator shall be mounted in the enclosure at the reservoir site.

ITEM NO. 14 –DRAWINGS, SHEET C-1

- A. On PLAN, **ADD** “CEDAR SITE FENCING” callout and leader to easterly reservoir site property boundary at the 14605 SW 130th Ave. residence. Cedar site fencing at this address shall extend the entire property boundary between 14605 SW 130th and the reservoir site and connect to existing fence on the adjacent properties.
- B. On PLAN, **ADD** “4’ HIGH BLACK PVC COATED CHAIN LINK FENCE” callout and leader to fence sections on the southerly and westerly property boundaries of the reservoir site.
- C. **ADD** the following notes:
3. ALL CEDAR SITE FENCING SHALL BE OF SIMILAR STYLE AND CONSTRUCTION AS THE EXISTING PROPERTY’S PRIVACY FENCING EAST OF THE SITE ALONG SW BULL MOUNTAIN ROAD. THE FENCE SHALL CONSIST OF 6” X 6” PRESSURE TREATED (PT) SUPPORT POSTS, CEDAR 2” X 6” TOP BOARD, 1” X 6” VERTICAL FENCE BOARDS WITH 5/4” X 4” TRIM BOARDS ON THE TOP AND BOTTOM AND 5/4” X 2” BATTEN BOARDS BETWEEN EACH VERTICAL FENCE BOARD. EACH SPAN BETWEEN SUPPORT POSTS SHALL BE 8’ IN LENGTH. PT POSTS SHALL EXTEND 4” ABOVE EACH FENCE SPAN AND THE TOP OF THE FENCE SHALL BE 6’ ABOVE FINISH GRADE.
 4. CONSTRUCTION PARKING PLAN: ALL CONSTRUCTION VEHICLE PARKING SHALL BE CONFINED TO THE SOUTH EAST CORNER OF THE PROPERTY AND BETWEEN THE TANK WALL AND THE NORTHERLY PROPERTY BOUNDARY.

ITEM NO. 15 –DRAWINGS, SHEET C-2

- A. On Sheet C-2, **MODIFY** grading plan around the park play structure area retaining wall to match the top of wall elevations shown on Sheet L-6, PLAYGROUND PLAN. Slope grade accordingly from the top of the park perimeter retaining wall to the existing ground surface surrounding the park area.
- B. On Sheet C-2, **ADD** the following note to TREE PROTECTION NOTES, DURING CONSTRUCTION:

8. TREES WEST OF TANK - PROVIDE TEMPORARY SHORING AS REQ'D AROUND PROTECTED TREES TO ENSURE ROOT PROTECTION AREA IS PRESERVED NEAR TANK EXCAVATION.

C. On Sheet C-2, **ADD** the following sheet note:

3. PROTECT EXISTING ASR WELLHEAD.

ITEM NO. 16 – DRAWINGS, SHEET C-3

A. On Plan, **ADD** the following note:

5. DURING CONSTRUCTION AND PRIOR TO CONSTRUCTION OF FINAL STORM DRAINAGE FACILITIES, TEMPORARILY ROUTE STORM WATER FROM EXISTING 12" STORM DRAIN AT PROPOSED STORM WATER QUALITY MH TO THE DRAINAGE DITCH ALONG THE EASTERLY PROPERTY BOUNDARY.

6. SECURE ALL MANHOLES WITH BOLT DOWN COVERS

B. On the STORM PIPING SCHEDULE Bubble note 4, **DELETE** "SHT C-3" and **ADD** "SHT C-11".

C. On the WATER PIPING SCHEDULE, make the following corrections:

1. Bubble note 1, **ADD** "DET 3, SHT C-13"
2. Bubble notes 6 and 7, **DELETE** "36'" and **ADD** "42'"
3. Bubble note 22, **DELETE** DET 3, SHT C-13 and **ADD** "DET 4, SHT C-13"

D. On PLAN, **RELOCATE** drinking fountain and route piping accordingly to location shown on Sheet L-6.

E. On PLAN, **ROUTE** 4" drain lines from the 24" Valve Access MH, Valve Vault and the 12" Valve Access MH (WATER PIPING SCHEDULE, Bubble notes 1, 12 and 22) to SDMH #5. Slope piping for gravity flow to SDMH #5.

F. On PLAN, **ADD** "FURNISH & INSTALL: NEW 36" CORRUGATED ALUMINIZED STL CULVERT ROUND PIPE (3) REQ'D" callout and leader to connecting pipes shown at the south end of the "OVERFLOW AND ASR FLUSHING WATER DETENTION PIPES..."

ITEM NO. 17 –DRAWINGS, SHEET C-10

A. On Detail 6, and NOTES, **DELETE** "36" DIA STL CASING" and **ADD** "42" DIA STL CASING"

B. On Detail 6, **DELETE** "16" DI PIPE" and **ADD** "24" DI PIPE"

ITEM NO. 18 –DRAWINGS, SHEET C-11

- A. On Detail 1, **DELETE** “12” SD” and **ADD** “18” SD
- B. On Detail 4, **DELETE** “6” FLAP VALVE” and **ADD** “12” FLAP VALVE”
- C. On Detail 5, **DELETE** “4 - 83” X 57” X 70’L CORRUGATED METAL PIPE – ARCHES” callout and **ADD**, “4 - 81” X 59” X 70’L CORRUGATED ALUMINIZED STL PIPE – ARCHES”

ITEM NO. 19 – TECHNICAL SPECIFICATIONS – DRAWINGS, SHEET C-21

- A. On PLAN, **ADD** sheet note “3. WHERE PROPOSED STRIPING IS TO BE PLACED, REMOVE EXISTING STRIPING”.

ITEM NO. 20– DRAWINGS, SHEET S-2

- A. Under SPECIAL INSPECTIONS: Note 1, **DELETE** the last sentence and **ADD** “REFER TO TABLES 1, 2, 5 & 6 FOR SPECIAL IN SPECTION AND TESTING REQUIREMENTS”.
- B. On Detail 1, at the bottom right corner of the detail **ADD** leaders and callout, “(4) #4 STIRRUPS AND BAR” to the 12” X 31” X 12” and 12” X 12” X 12” stirrups and 79” bar. Also **ADD** leader and callout, “(6) #5 STIRRUP” to the 12” X 59” X 28” X 12” stirrup.

ITEM NO. 21– TECHNICAL SPECIFICATIONS – DRAWINGS, SHEET S-12

- A. On Detail 1, Section A **DELETE** “2-24” WATER FLEX WF-3 CHKV” callout and **ADD** “2-24” RED VALVE TIDEFLEX WATERFLEX WF-3 CHKV”.
- B. On Detail 1, **DELETE** sump dimension, “3’-0”” and **ADD** dimension, “3’-6””. Extend dimension line accordingly to expose flange of spool for connection of Waterflex check valves.
- C. On Detail 4, **DELETE** callout for “2”x2½” SST Male x Male NST x Female NPT Reducer”.

ITEM NO. 22–DRAWINGS, SHEET E-1

- A. On Detail 1, Electrical Site Plan, **ADD** Circuit 14 in 1” raceway with Circuits 5 and 6.

ITEM NO. 23–DRAWINGS, SHEET E-2

- A. On Detail 2, Inlet/Outlet Vault Electrical:
 - 1. **DELETE** LT-1 and connection to Raceway 14.
 - 2. **ADD** Circuit14 in 1” raceway to reservoir with Circuits 5 and 6.

- B. On Circuit and Raceway Schedule, Circuit 14 Comment, **ADD** "Provide 20-feet extra TSP and coil in the TJB. Pull cable directly from LT-1 to the Telemetry Panel via raceway 3; do not terminate in the TJB".

ITEM NO. 24– DRAWINGS, SHEET E-3

- A. **DELETE** Detail 2, Hatch Partial Plan and **ADD** attached Detail 2, Hatch Partial Plan.
- B. On Section A, **DELETE** "'1" PVC CONDUIT SLEEVE. TYPICAL OF 2 PROVIDE NON-SHRINK GROUT, WATER-TIGHT SEAL ALL AROUND PENETRATION" callout and **ADD** "'1" PVC CONDUIT SLEEVE. TYPICAL OF 3 PROVIDE NON-SHRINK GROUT, WATER-TIGHT SEAL ALL AROUND PENETRATION".

ITEM NO. 25– DRAWINGS, SHEET L-2

- A. **DELETE** DETAIL 2 – ASPHALT PATH/PAVING
- B. On Detail 6, **DELETE** "200 (8) HOT DIP GALVE SCH 40 STL PIPE W/CONC FILL, PRIME & PAINT SAFETY BLUE W/UPPER 1'-6" SAFETY ORANGE (SEE SPECS)" callout and **ADD** "(6") HOT DIP GALVE SCH 40 STL PIPE W/CONC FILL, PRIME & PAINT SAFETY BLUE W/UPPER 1'-6" SAFETY ORANGE (SEE SPECS). PROVIDE 4 BOLLARDS AT THE TELEMETRY ENCLOSURE. LOCATE PER ENGINEER".